[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1331; Directorate Identifier 2012-NE-44-AD; Amendment 39-18390; AD 2016-03-03]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc Turbojet Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding airworthiness directive (AD) 2013-11-13 for all Rolls-Royce plc (RR) Viper Mk. 601-22 turbojet engines. AD 2013-11-13 required reducing the life of certain critical parts. This AD adds two new engine models and additional engine parts to the applicability. This AD was prompted by a determination by RR that additional parts for the RR Viper Mk. 601-22 as well as additional engine models are affected. We are issuing this AD to prevent failure of life-limited parts, which could lead to an uncontained part release, damage to the engine, and damage to the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact DA Services

Operations Room at Rolls-Royce plc, Defense Sector Bristol, WH-70, P.O. Box 3, Filton,

Bristol BS34 7QE, United Kingdom; phone: +44 (0) 117 97 90700; fax: +44 (0) 117 97

95498; email: defence-operations-room@rolls-royce.com. You may view this service

information at the FAA, Engine & Propeller Directorate, 1200 District Avenue,

Burlington, MA. For information on the availability of this material at the FAA, call 781
238-7125. It is also available on the Internet at http://www.regulations.gov by searching

for and locating Docket No. FAA-2012-1331.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2012-1331; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information, regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2013-11-13, Amendment 39-17473 (78 FR 34550, June 10, 2013), ("AD 2013-11-13"). AD 2013-11-13 applied to the specified products. The NPRM published in the <u>Federal Register</u> on October 9, 2015 (80 FR 61131). The NPRM proposed to continue to require reducing the life of certain critical parts. That NPRM also proposed to add additional parts for the RR Viper Mk. 601-22 as well as additional engine models to the applicability of this AD.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (80 FR 61131, October 9, 2015).

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 61131,
 October 9, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 61131, October 9, 2015).

Related Service Information under 1 CFR Part 51

RR has issued RR Alert Service Bulletin (ASB) Mk. 521 Number 72-A408, Circulation A, dated January 2015; RR ASB Mk. 521 Number 72-A408, Circulation B,

dated January 2015; RR ASB Mk. 522 Number 72-A413, Circulation A, dated January 2015; RR ASB Mk. 522 Number 72-A412, Circulation B, dated January 2015; and RR ASB Mk 601-22 Number 72-A207, dated January 2015. The service information describes procedures for identifying the affected parts installed on each engine and determining their respective new life limit. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this final rule.

Costs of Compliance

We estimate that this AD affects about 46 engines installed on airplanes of U.S. registry. We estimate a pro-rated parts cost of \$66,000 per engine. We also estimate that it will take about 4 hours per engine to comply with this AD. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$3,051,640.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII,
Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress
charges the FAA with promoting safe flight of civil aircraft in air commerce by
prescribing regulations for practices, methods, and procedures the Administrator finds
necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) AD 2013-11-13, Amendment 39-17473 (78 FR 34550, June 10, 2013), ("AD 2013-11-13"), and adding the following new AD:

2016-03-03 Rolls-Royce plc (Type Certificate previously held by Rolls-Royce (1971) Limited, Bristol Engine Division): Amendment 39-18390; Docket No. FAA-2012-1331; Directorate Identifier 2012-NE-44-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2013-11-13.

(c) Applicability

This AD applies to all Rolls-Royce plc (RR) Viper Mk. 521, Viper Mk. 522, and Viper Mk. 601-22 turbojet engines.

(d) Unsafe Condition

This AD was prompted by a review by RR of the lives of certain critical parts. We are issuing this AD to prevent failure of life-limited parts, which could lead to an uncontained part release, damage to the engine, and damage to the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Within 30 days after the effective date of this AD, or before any affected part exceeds its new revised life limit, whichever occurs later, remove any affected engine

from service. Use Table 1 of RR Alert Service Bulletin (ASB) Mk. 521 Number 72-A408, Circulation A, dated January 2015; RR ASB Mk. 521 Number 72-A408, Circulation B, dated January 2015; RR ASB Mk. 522 Number 72-A413, Circulation A, dated January 2015; RR ASB Mk. 522 Number 72-A412, Circulation B, dated January 2015; and RR ASB Mk 601-22 Number 72-A207, dated January 2015, to identify the affected parts installed on each engine and determine their respective new life limits.

- (2) For the RR Viper Mk. 601-22 turbojet engine, remove compressor shaft, part number V900766, from service before the compressor shaft accumulates 20,720 flight cycles since new.
- (3) Replace any part identified in paragraph (e)(1) or (e)(2) of this AD with a part eligible for installation before the affected part reaches its new life limit specified in paragraph (e)(2) of this AD or in the ASBs referenced in paragraph (e)(1) of this AD.

(f) Installation Prohibition

After the effective date of this AD, do not install any affected part identified in paragraph (e) of this AD into any engine, nor return any engine to service with any affected part identified in paragraph (e) of this AD installed, if any affected part exceeds the life limit specified in the appropriate ASB identified in paragraph (e)(1) of this AD and/or the life limit identified in paragraph (e)(2) of this AD.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(h) Related Information

- (1) For more information about this AD, contact Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.
- (2) Refer to MCAI European Aviation Safety Agency AD 2015-0127R1, dated August 14, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2012-1331.

(i) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) Rolls-Royce plc (RR) Alert Service Bulletin (ASB) Mk. 521 Number 72-A408, Circulation A, dated January 2015.
 - (ii) RR ASB Mk. 521 Number 72-A408, Circulation B, dated January 2015.
 - (iii) RR ASB Mk. 522 Number 72-A413, Circulation A, dated January 2015.
 - (iv) RR ASB Mk. 522 Number 72-A412, Circulation B, dated January 2015.
 - (v) RR ASB Mk 601-22 Number 72-A207, dated January 2015.
- (3) For RR service information identified in this AD, contact DA Services

 Operations Room at Rolls-Royce plc, Defense Sector Bristol, WH-70, P.O. Box 3, Filton,

Bristol BS34 7QE, United Kingdom; phone: +44 (0) 117 97 90700; fax: +44 (0) 117 97

95498; email: defence-operations-room@rolls-royce.com.

(4) You may view this service information at FAA, Engine & Propeller

Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of

this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records

Administration (NARA). For information on the availability of this material at NARA,

call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-

locations.html.

Issued in Burlington, Massachusetts, on February 2, 2016.

Ann C. Mollica,

Acting Manager, Engine & Propeller Directorate,

Aircraft Certification Service.

[FR Doc. 2016-05319 Filed: 3/9/2016 8:45 am; Publication Date: 3/10/2016]

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